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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.    | CONFIRMATION NO. |
|---|-------------|----------------------|------------------------|------------------|
| 10/616,226  | 07/09/2003  | Joel Chatal          | A815.312-0002          | 2234             |
| 164   | 7590        | 12/06/2004           | EXAMINER               |                  |
| KINNEY & LANGE, P.A.<br>THE KINNEY & LANGE BUILDING<br>312 SOUTH THIRD STREET<br>MINNEAPOLIS, MN 55415-1002 |             |                      | ZWEIZIG, JEFFERY SHAWN |                  |
|   |             |                      | ART UNIT               | PAPER NUMBER     |
|   |             |                      | 2816                   |                  |

DATE MAILED: 12/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/616,226

Applicant(s)

CHATAL, JOEL

Examiner

Jeffrey S. Zweizig

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,5 and 7-26 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,5,7-11,16-19 and 24-26 is/are allowed.
- 6) ☒ Claim(s) 12-15 and 20-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Objections to the Specification***

1. The Abstract should be limited to a single paragraph.
2. The specification repeatedly uses the word "grid" in reference to the disclosed MOSFETs. It would appear that "grid" should be --gate--. The specification should be carefully checked for other errors that may have been incurred during translation.

***Claim Objections***

In claim 5 line 12, it would appear that "first, second" should be --first and second--.

In claim 5 line 22, it would appear that "grids" should be --gates--.

In claim 8 line 21, it would appear that "grids" should be --gates--.

In claim 10 line 2, it would appear that "grids" should be --gates--.

***Response to Amendment***

3. In light of the amendments to the claims, all previous rejections are withdrawn and new rejections are presented below.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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5. Claims 12-15 and 20-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Insofar as understood, the gist of independent claims 1 and 7 is directed toward that disclosed in Figs. 2 or 4. Currents I4 and I5 from Figs. 2 or 4 appear to be the same currents I4 and I5 shown in Fig. 5.

Dependent claims 12-15 and 20-23 appear to be directed toward I6, I7, R4 and 550 from Fig. 5. However, there would appear to be insufficient technical support for the derivation of currents I6 and I7. Figs. 2 and 4 do not appear to produce I6 and I7 and the specification does not clearly explain from where I6 and I7 are derived. In fact, I6 and I7 appear to behave in a manner opposite to the I4 and I5 currents produced by the circuits of Figs. 2 and 4.

On page 12 of Applicant's remarks filed 11/17/04, Applicant notes paragraphs 70-72. Examiner's copy of the Specification does not include paragraph numbers. However, Fig. 5 is discussed beginning on page 30 of the Specification. Currents I6 and I7 are discussed beginning on page 32. Page 32 references transistors M33 and M44, however, these components are not found in any drawing. It would appear that the discussion is directed toward a modified embodiment of Figs. 2 and 4. However, it is the Examiner's position that the Specification does not clearly support this modified embodiment. Based on the disclosure, one of ordinary skill in the art would not be able

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to derive I6 and I7 without undue experimentation. Therefore, claims 12-15 and 20-23 are not properly enabled.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey S. Zweizig whose telephone number is (571) 272-1758. The examiner can normally be reached on Monday thru Thursday 6:00 am to 4:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jeffrey S. Zweizig  
Primary Examiner  
Art Unit 2816

JZ